

CLAIMS LISTING

Please amend the claims as follows:

- 1.-14. (canceled)
15. (currently amended): A liquid crystal display device, comprising:
an alignment layer comprising constituent materials,~~the constituent materials having a stoichiometric ratio to provide a given pretilt angle;~~ and
liquid crystal material in contact with the alignment layer,
wherein the constituent materials have a stoichiometric ratio that imparts a predetermined pretilt angle to the liquid crystal material.
16. (previously presented): The device as recited in claim 15, wherein the alignment layer includes SiC_x wherein x provides the stoichiometric relationship.
17. (previously presented): The device as recited in claim 15, wherein the alignment layer includes silicon oxynitride.
18. (previously presented): The device as recited in claim 15, wherein the alignment layer includes a constituent material having Pi-electrons.
19. (currently amended): The device as recited in claim 15, wherein the alignment layer includes a tilted homeotropic ~~alignment layer~~ liquid crystal material.

20. (canceled)

21. (currently amended): A liquid crystal display device, comprising:

an alignment layer comprising constituent materials, ~~including the alignment layer having a preexisting pretilt angle~~; an additional amount of at least one of the constituent materials ~~for providing a stoichiometric ratio of the constituent materials of the alignment layer, wherein the amount provides a given pretilt angle of the alignment layer different than the preexisting pretilt angle of the alignment layer~~; and

liquid crystal material in contact with the alignment layer,

wherein the constituent materials of the alignment layer have a stoichiometric ratio that imparts a preexisting pretilt angle to the liquid crystal material, and the additional amount of at least one of the constituent materials imparts a predetermined pretilt angle to the liquid crystal material different than the preexisting pretilt angle of the alignment layer.

22. (previously presented): The liquid crystal display device of claim 15, further comprising ions directed at the alignment layer to provide uniformity of the pretilt angle.

23. (previously presented): The liquid crystal display device of claim 21, further comprising ions directed at the alignment layer to provide uniformity of the pretilt angle.

24. (currently amended): A liquid crystal display device, comprising:

an alignment layer comprising a first material ~~which provides a homeotropic alignment~~
and a second material ~~in an amount to provide a given pretilt angle to the alignment layer, the~~
~~second material providing a more homogeneous alignment than the first material; and~~

liquid crystal material in contact with the alignment layer,

wherein the first material imparts a homeotropic alignment in the liquid crystal material,
the second material imparts a homogeneous alignment in the liquid crystal material and the
second material is in an amount to impart a predetermined pretilt angle to the liquid crystal
material, and the first and second materials are selected from a group comprising Si, O, N, C,
SiO_x, Si_xN_y, SiC_x, amorphous silicon (a-Si), and amorphous carbon (a-C:H or diamond-like-
carbon (DLC)).

25. (currently amended): The liquid crystal display device of claim 24[[23]], further
comprising ions directed at the alignment layer to control the uniformity of the pretilt angle.

26. (new): The liquid crystal display device of claim 15, wherein the pretilt angle is
achieved solely by the stoichiometric ratio.

27. (new): The liquid crystal display device of claim 15, wherein the pretilt angle is
achieved without rubbing.

28. (new): The liquid crystal display device of claim 21, wherein the pretilt angle is
achieved solely by the stoichiometric ratio.

29. (new): The liquid crystal display device of claim 21, wherein the pretilt angle is achieved without rubbing.

30. (new): The liquid crystal display device of claim 24, wherein the pretilt angle is achieved without rubbing.